DOCUMENT RESUME

ED 300 070 JC 880 486

TITLE	Technical Education Placement Report, Fiscal Year 1987.
INSTITUTION	Ohio Board of Regents, Columbus.
PUB DATE	15 Jul 88
NOTE	38p.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*College Graduates; Employment Patterns; *Job Placement; *Outcomes of Education; State Surveys; *Technical Education; Two Year Colleges; Two Year College Students; Vocational Followup
IDENTIFIERS	*Ohio

ABSTRACT

Each year, the Ohio Board of Regents requests all 46 state-assisted college and university campuses offering technical associate degree programs to provide information on degrees awarded by program and to survey recent graduates concerning their employment status and the relationship between their job and their field of study. Between summer 1986 and spring 1987, the colleges awarded 12,221 technical associate degrees in business, engineering and industrial technology, health technologies, agriculture and natural resources, and public services. The colleges were requested to survey their graduates two months after graduation, and to conduct follow-up surveys of non-respondents as necessary. Study findings, based on a statewide response rate of 84.9%, included the following: (1) community colleges accounted for 33.3% of the total degrees awarded, technical colleges for 39.2%, and urban technical centers for 17.2%; (2) 41.3% of the degrees were awarded to business majors, 20.7% to engineering technologies graduates, 27.3% to health technologies graduates, 3.1% to agriculture and natural resources majors, and 7.6% to public services graduates; (3) of the 10,381 respondents, 9.9% were continuing their education and were unavailable for employment; (4) of the 9,070 graduates who entered the labor market upon graduation, 94.3% found employment and 82.1% found jobs related to their training; and (5) the placement rate for agriculture and natural resources graduates increased from 90.9% in 1986 to 93.4% in 1987. The study report analyzes placement findings by program. (AYC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED300070

TECHNICAL EDUCATION PLACEMENT REPORT

FISCAL YEAR 1987

Ohio Board of Regents
July 15, 1988

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

M. Nooan

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

JC 880 486

BEST COPY AVAILABLE

TABLE OF CONTENTS

I. INTRODUCTION..... 1

Purposes of the Survey..... 2
Limitations..... 3
Procedures and Methodology..... 5

II. FINDINGS..... 6

Number and Distribution of Degrees Awarded..... 6
Graduates Continuing Education
Beyond the Associate Degree..... 7
General Employment..... 9
Employment in Technical Field by Program..... 10
Review of Selected Findings by Program Area.... 12
Business Technologies..... 12
Engineering and Industrial Technologies... 17
Health Technologies..... 21
Agricultural and Natural Resources
Technologies..... 21
Public Service Technologies..... 23
Productivity..... 25

III. SUMMARY..... 33

TECHNICAL EDUCATION PLACEMENT REPORT

FISCAL YEAR 1987

INTRODUCTION

In Autumn Quarter 1986, approximately 90,083 students were enrolled in the technical associate degree programs offered on forty-six state-assisted college and university campuses. In FY 1987 alone, the State of Ohio spent in excess of $105 million in direct support of technical education, and since 1975 has invested over $38 million in special appropriations for the technical equipment required by such programs. Technical education, therefore, represents a considerable expenditure of state resources.

The primary purpose of technical education is the preparation of people for employment at the conclusion of up to two years of study. Unlike that of many educational efforts with more general and sometimes diffuse goals, the continuing effectiveness of technical education can be objectively assessed by an annual survey of the employment status of graduates of technical programs.

Each year the Ohio Board of Regents' Office of Two-Year Campuses asks all institutions offering technical associate degree programs to conduct such a survey. The following is a report of the results of the survey of the employment status of technical associate degree graduates who received degrees from Summer Quarter 1986 to Spring Quarter 1987.

Purposes of the Survey

The annual placement report serves a number of purposes of the Ohio Board of Regents. As the planning and coordinating agency responsible for approving new technical programs and for working with the colleges and universities to ensure the quality of all continuing programs, the Board has an ongoing need for current data on job placement. Decisions by the colleges and universities to submit new technical education programs for approval and actions by the Board in response to those requests are based in each case upon a finding of a labor market need as a necessary condition. Decisions about the continuation of approved programs are also made by the Board and by the colleges and universities with attention to changes in labor market demand which are evidenced in the data collected for the annual placement report. The Board and the colleges and universities work cooperatively to develop and maintain excellence in two-year campus academic programs, and they mutually support each other's efforts in this regard.

When the data reported in the annual placement report suggest that attention should be given to a particular technical associate degree program, the institution(s) offering the program, the Board of Regents' staff, or both may call for a lateral program review to complement the comprehensive five-year review conducted routinely by the Regents. The placement report data may, therefore, be used to identify and address certain kinds of problems more quickly than might otherwise be the case.

The placement report may also be used on a year-to-year basis to identify changes in labor market conditions which might indicate that a given labor market is saturated with a particular type of program graduate. The report may in such cases be used as a basis for dialogue between the colleges, universities, and Regents' staff and lead to recommendations or agreements about the number of programs needed statewide or in a particular region.

Finally, as the state agency responsible to the citizens of Ohio for the effective expenditure of the state's resources for higher education, the Board has an interest in gathering information regarding program quality and effectiveness and sharing this information with the public and their elected representatives. The placement report, with its attention to the various purposes described above, serves as an important mechanism for fulfilling this responsibility.

Limitations

Care must be exercised in interpreting some of the findings in the annual placement report. While prima facie inferences regarding continued program need may reasonably be drawn from these findings, lower than expected job placement does not necessarily indicate an absence of quality, need, or effectiveness. There may be structural peculiarities of a given labor market, such as an age requirement for job entry, which defers placement. The market for a particular type of graduate may be temporarily

depressed for reasons quite apart from need and recovery may be expected within a reasonable period of time, particularly in public service technical occupations. Some technical programs address statewide labor market needs requiring graduates to relocate - and some graduates may be reluctant to do so. Finally, the point in time at which the survey is conducted varies among institutions. Some survey graduates immediately after graduation with no follow-up; such a procedure, if followed by a large institution, may artificially and negatively distort a true reading.

A final limitation on interpreting the data contained in this report must also be mentioned. A comparison of the total number of associate degrees awarded during Fiscal Year 1987 (12,221) to the total number of freshmen enrolled in the Autumn Quarter of 1985 (92,182) might seem to indicate an alarmingly high rate of attrition. While the rate derived from such a comparison is commonly used as a rough measure of attrition, it is not in and of itself particularly enlightening, nor may firm conclusions be drawn from such a figure. First, the Ohio rate is comparable to national averages for all students enrolling in two-year colleges. Second, an attrition rate is not necessarily indicative of program failure inasmuch as nearly one-third of all students do not enroll in Ohio's two-year colleges for the purpose of completing a degree, and many students receive the training they need for entry-level employment prior to completing degree requirements. For these and other reasons, inferences regarding attrition based upon this simple comparison should not

be drawn. The Regents' Office of Two-Year Campuses is sensitive to evidence of abnormally high attrition during the five-year review and raises concerns when warranted, but this report should not be used to support any conclusions regarding attrition apart from other studies using instrumentation specifically designed for that purpose.

Procedures and Methodology

In January of each year the Regents' Office of Two-Year Campuses requests a placement report from each institution offering technical education programs. Institutions are asked to report the total number of degrees awarded in each program offered, the number of those graduates placed in jobs related to their technical training, the number of graduates placed in jobs not directly related to their technical training, and the number of graduates reporting themselves as available for employment but unemployed. Institutions are also asked for the number of their graduates who are unavailable for employment either because they are furthering their education or for other reasons, such as military service, parenting, etc.

To provide complete and accurate information for this report, institutions are encouraged to survey their graduates two months after graduation with follow-up inquiries made of non-respondents three and five months later if necessary. The specific procedures used in conducting the surveys are, however, determined by the individual institutions, a number of which do not follow the recommended schedule. Response rates, therefore,

vary from institution to institution. The overall response rate for this year's placement survey, however, is 84.9%, slightly higher than last year and more than adequate for the purposes of this study.

Response rates by category for the last three years were:

	1987	1986	1985
Business	85.1%	82.8%	85.3%
Engineering/Industrial	86.1%	84.3%	87.0%
Health	84.1%	82.2%	81.6%
Agriculture/Natural Res.	91.0%	89.8%	89.1%
Public Services	81.5%	80.6%	83.6%

These rates are sufficiently close to the statewide response rate to put to rest any fears that results might be skewed by over or under response in any particular technical category.

FINDINGS

The findings of the Fiscal Year 1987 technical graduate placement survey are summarized as follows:

Number and Distribution of Degrees Awarded

In Fiscal Year 1987, forty-six state-assisted community colleges, technical colleges, university branch campuses and urban technical centers awarded 12,221 technical associate degrees in five categories or "technologies": business, engineering and industrial, health, agricultural and natural resources, and public service. This represents a small (5.2%) decrease from the number of technical associate degrees awarded in Fiscal Year 1986.

The relative contribution of the four types of two-year campuses to the total number of degrees awarded remains roughly the same as last year. Community colleges registered the biggest change and accounted for 33.3% of the total as compared to 27.6% last year. Technical colleges accounted for 39.2% as compared to 42.5% last year. University branch campuses accounted for 10.3% as compared to 11.3% last year. And, urban technical centers accounted for 17.2% as compared to 18.6% last year.

The distribution of degrees awarded among the five categories of technical programs was also roughly the same as last year. Degrees awarded in the business technologies accounted for 41.3% of all degrees awarded as compared to 42% last year. Engineering technologies degrees accounted for 20.7% as compared to 20% last year. Health technologies degrees accounted for 27.3% as compared to 28.2% last year. Degrees in the agricultural and natural resources technologies accounted for 3.1% as compared to 2.7% last year. And, degrees awarded in the public service technologies accounted for 7.6% of the total as compared to 6.9% last year.

Graduates Continuing Education Beyond the Associate Degree

Of the 10,381 technical education graduates who responded to the Fiscal Year 1987 placement surveys, 1,023 (9.9%) reported that they were continuing their education and were, therefore, unavailable for employment (Table 1). This percentage is the same as the corresponding percentage reported last year. Low overall percentages such as the ones reported this year and last

TABLE 1
1986 - 1987
TECHNICAL PROGRAM GRADUATE JOB PLACEMENT
ANALYSIS BY TYPE OF CAMPUS AND TECHNICAL EDUCATION CATEGORY

		PROGRAMS	DEGREES GRANTED	RESP	%	FURTHER EDUCN	%	OTHERWISE NOT AVAILABLE	%	AVAIL FOR EMPLOY	%	EMPLOYED	%	NOT EMPLOYED	%
COMMUNITY	BUSINESS	70	1669	1305	78.2	105	8.0	28	2.1	1172	89.8	1086	92.7	86	7.3
	ENGINEERING	61	718	580	80.8	61	10.5	4	.7	515	88.8	467	90.7	48	9.3
	HEALTH	52	1360	1067	78.5	33	3.1	21	2.0	1013	94.9	982	96.9	31	3.1
	AG-MAT RESOURCES	1	1	1	100.0	1	100.0	0	0.0	0	0.0	0	.	0	.
	PUBLIC SERV	28	328	250	76.2	33	13.2	5	2.0	212	84.8	199	93.9	13	6.1
	TOTAL	212	4076	3203	78.6	233	7.3	58	1.8	2912	90.9	2734	93.9	178	6.1
TECHNICAL	BUSINESS	101	1915	1697	88.6	119	7.0	73	4.3	1505	88.7	1405	93.4	100	6.6
	ENGINEERING	100	1174	1008	85.9	81	8.0	23	2.3	904	89.7	852	94.2	52	5.8
	HEALTH	50	1248	1108	88.8	12	1.1	24	2.2	1072	96.8	1060	98.9	12	1.1
	AG-MAT RESOURCES	10	221	192	86.9	25	13.0	3	1.6	164	85.4	150	91.5	14	8.5
	PUBLIC SERV	21	232	209	90.1	22	10.5	4	1.9	183	87.6	162	88.5	21	11.5
	TOTAL	282	4790	4214	88.0	259	6.1	127	3.0	3828	90.8	3629	94.8	199	5.2
BRANCHES	BUSINESS	49	551	488	88.6	35	7.2	13	2.7	440	90.2	410	93.2	30	6.8
	ENGINEERING	25	167	155	92.8	14	9.0	0	0.0	141	91.0	131	92.9	10	7.1
	HEALTH	14	348	300	86.2	8	2.7	8	2.7	284	94.7	280	98.6	4	1.4
	AG-MAT RESOURCES	14	154	149	96.8	12	8.1	1	.7	136	91.3	131	96.3	5	3.7
	PUBLIC SERV	9	39	38	97.4	13	34.2	0	0.0	25	65.8	23	92.0	2	8.0
	TOTAL	111	1259	1130	89.8	82	7.3	22	1.9	1026	90.8	975	95.0	51	5.0
URBAN TECH	BUSINESS	38	917	809	88.2	111	13.7	39	4.8	659	81.5	600	91.0	59	9.0
	ENGINEERING	24	474	437	92.2	200	45.8	12	2.7	225	51.5	216	96.0	9	4.0
	HEALTH	18	381	332	87.1	28	8.4	23	6.9	281	84.6	272	96.8	9	3.2
	AG-MAT RESOURCES	1	2	2	100.0	0	0.0	0	0.0	2	100.0	1	50.0	1	50.0
	PUBLIC SERV	16	322	254	78.9	110	43.3	7	2.8	137	53.9	126	92.0	11	8.0
	TOTAL	97	2096	1834	87.5	449	24.5	81	4.4	1304	71.1	1215	93.2	89	6.8
TOTAL		702	12221	10381	84.9	1023	9.9	288	2.8	9070	87.4	8553	94.3	517	5.7

are to be expected given that a low level of transfer from technical associate degree programs to baccalaureate degree programs is both normal and appropriate to the objectives of technical education. It should be noted in this context that urban technical center graduates were, as they have been for several years, much more likely to transfer to baccalaureate programs than graduates of community college, technical college and university branch campus programs.

General Employment

Subtracting from the total number of survey respondents the 1,023 who indicated they were continuing their education and an additional 288 who indicated they were unavailable for employment for other reasons, 9,070 Fiscal Year 1987 technical associate degree graduates entered the labor market upon graduation. Of these, 8,553 or 94.3% were placed in jobs (Table 1). This overall placement "rate" is almost a full percentage point higher than that recorded in Fiscal Year 1986 and is the highest rate recorded since 1980.

Considered another way, the unemployment rate for graduates of technical associate degree programs was 5.7% in Fiscal Year 1987 as compared to 6.4% in Fiscal Year 1986, almost a full percent lower. The annual (calendar year) average unemployment rate for all Ohio workers of the same age as the typical associate degree graduate during 1987 was 16.5% and the comparable national rate was 9.7%. While the unemployment rate for associate degree graduates was still higher than we might hope, the rate compares quite

favorably to these state and national averages.

Relative increases in overall placement rates from last year's levels were experienced in four categories. The placement rate for agriculture and natural resources technologies graduates increased from 90.9% to 93.4%. The placement rate for health technologies graduates increased from 96.7% to 97.9%. The placement rate for engineering technologies graduates increased from 92.5% to 93.3%. The placement rate for business technologies graduates increased from 92.2 to 92.7. The placement rate for public services technologies graduates decreased slightly from 92.9% to 91.6%.

Employment in Technical Field by Program

While overall placement rates for programs designed for job preparation provide the Board of Regents with one way of gauging the general success of technical education, a different standard is used to assess the continued need for specific types of programs. An overall placement rate is a satisfactory measure of the achievement of the general objective of employment at the end of the associate degree. The need for a specific program, however, can better be assessed by a closer examination of the type of jobs in which graduates are placed. The annual placement survey, therefore, asks not only for information about the number of graduates who enter employment but also about the number who enter employment in occupations directly related to the particular type of training they received.

It is recognized that not every person capable of completing

degree requirements will be competitive enough in the particular labor market he/she has chosen to be placed immediately in a job related to his/her training. It is also recognized that some graduates will choose positions that are not necessarily related to the specific training they received for a variety of reasons; e.g., changed career interest, changed career goals, opportunities for higher earnings than the original career choice would have generated, particular family circumstances etc. While graduates placed in unrelated jobs are not necessarily the result of program "failure," the Regents' Office of Two-Year Campuses has adopted the position that documentation of the continued need for technical programs which are designed to prepare students for specific clusters of occupations must include evidence that at least 75% of the graduates of such programs are placed in jobs specifically related to their training.

In the aggregate, the 75% standard was exceeded in 1987. Of the 9,070 technical associate degree graduates who entered the labor market, 7,449 or 82.1% located jobs related to their training. This "technical placement rate" is 1.2% higher than the corresponding rate recorded in Fiscal Year 1986 and is the highest technical placement rate recorded since 1981.

Relative increases in technical placement rates from last years's levels were experienced in four technical categories and programs in four categories met or exceeded the 75% standard. The technical placement rate for agricultural and natural resources

technologies increased from 70.6% to 77.5%. The technical placement rate for health technologies graduates increased from 92.7% to 95.7%. The technical placement rate for business technologies graduates increased from 75.8% to 77%. The technical placement rate for engineering technologies graduates increased slightly from 76.2% to 76.4%. The technical placement rate for public services technologies graduates decreased from 75.5% to 72.9%.

Review of Selected Findings by Program Area

In the sections which follow, findings selected from Tables 2 through 7 are presented for each program area or "technology." Overall placement rates and technical placement rates are reviewed and particular attention is given to programs which substantially improved performance during Fiscal Year 1987 and to those which have had substandard performance for three or more years.

No attempt is made here to treat the findings of the placement survey comprehensively. Readers who wish to know more about the programs which have been selected for attention or about other programs not mentioned here should refer to Tables 2 through 7 for more complete information.

Business Technologies

In Fiscal Year 1987, 41.3% of the technical associate degrees awarded by Ohio's state-assisted two-year campuses were awarded to graduates of programs in the business technologies. The overall

TABLE 2
1986 - 1987
TECHNICAL PROGRAM GRADUATE JOB PLACEMENT
BUSINESS PROGRAMS

	NUMBER OF PROGRAMS	GRADUATES	RESPONDENTS	AVAILABLE FOR EMPLOYMENT	NUMBER EMPLOYED IN TECHNICAL FIELD	PERCENT EMPLOYED IN TECHNICAL FIELD	NUMBER EMPLOYED OUTSIDE FIELD	PERCENT EMPLOYED OUTSIDE FIELD	NUMBER UNEMPLOYED	PERCENT UNEMPLOYED
ACCOUNTING	36	833	723	652	482	73.9	115	17.6	55	8.4
COMMERCIAL ART	5	104	87	72	49	68.1	13	18.1	10	13.9
GRAPHIC ARTS	4	38	34	29	21	72.4	6	20.7	2	6.9
INTERIOR DESIGN	1	10	6	6	6	100.0	0	0.0	0	0.0
BUSINESS MGT	44	1276	1063	923	669	72.5	172	18.6	82	8.9
AVIATION	1	3	2	2	1	50.0	1	50.0	0	0.0
PURCHASING	1	23	22	21	16	76.2	4	19.0	1	4.8
RETAIL	8	90	75	62	47	75.8	12	19.4	3	4.8
DATA PROCESSING	18	624	498	436	337	77.3	69	15.8	30	6.9
CPTR PROGRAMMING	24	392	361	320	223	69.7	66	20.6	31	9.7
FINANCIAL MGT	11	79	72	65	55	84.6	7	10.8	3	4.6
HOSPITALITY MGT	9	149	125	106	96	90.6	7	6.6	3	2.8
CULINARY ARTS	3	34	27	27	25	92.6	2	7.4	0	0.0
FOOD SERVICE	2	15	15	11	9	81.8	1	9.1	1	9.1
HOTEL MGT	1	7	2	2	2	100.0	0	0.0	0	0.0
TRAVEL & TOURISM	2	31	31	24	15	62.5	6	25.0	3	12.5
LEGAL ASSISTING	3	70	62	51	43	84.3	6	11.8	2	3.9
MARKETING	11	256	224	167	126	75.4	28	16.8	13	7.8
INDUST MARKETING	2	50	29	27	18	66.7	8	29.6	1	3.7
INSURANCE	1	6	6	6	6	100.0	0	0.0	0	0.0
SECRETARIAL	51	874	760	702	618	88.0	53	7.5	31	4.4
COURT REPORTING	4	17	16	16	15	93.8	0	0.0	1	6.3
REAL ESTATE	10	26	20	16	11	68.7	4	25.0	1	6.3
TRANSPORTATION	5	44	38	32	17	53.1	13	40.6	2	6.2
LOGISTICS	1	1	1	1	1	100.0	0	0.0	0	0.0
TOTAL	258	5052	4299	3776	2908	77.0	593	15.7	275	7.3

TABLE 3
TECHNICAL PLACEMENT RATE BY PROGRAM COMPARED TO PREVIOUS TWO YEARS

Program	Technical Placement Rate 1987	1986	1985
BUSINESS			
Accounting	73.9	68.3	73.0
Advertising	----	----	50.0
Aviation	50.0	100.0	50.0
Business Management	72.5	76.5	74.0
Commercial Art	68.1	77.0	70.9
Computer Programing	69.7	63.5	61.1
Court Reporting	93.8	76.9	83.3
Culinary Arts	92.6	90.6	81.8
Data Processing	77.3	69.9	68.4
Financial Management	84.6	84.8	82.5
Food Service	81.8	83.3	95.5
Graphic Arts	72.4	73.0	50.0
Hospitality Management	90.6	90.3	84.3
Hotel Management	100.0	100.0	----
Industrial Marketing	66.7	76.9	76.5
Insurance	100.0	80.0	66.7
Interior Design	100.0	66.7	66.7
Legal Assisting	84.3	90.6	93.3
Logistics	100.0	100.0	50.0
Marketing	75.4	79.4	71.4
Purchasing	76.2	86.7	76.5
Real Estate	68.7	62.5	78.9
Retail	75.8	77.6	83.7
Secretarial	88.0	86.1	88.3
Transportation	53.1	80.0	82.1
Travel and Tourism	62.5	55.6	64.3
Wholesale	----	----	100.0
TOTAL	77.0	75.7	74.9
ENGINEERING			
Architectural	87.2	77.4	78.9
Automotive	85.4	84.0	87.5
Aviation Engineering	76.9	77.8	68.7
Avionics	----	----	00.0
Biomedical Equipment	94.1	80.0	93.1
Ceramic	87.5	90.9	93.3
Civil/Construction	89.6	84.0	90.1
Climate Control	87.5	71.8	75.5
Computer Electronics	71.9	61.8	58.3
Diesel	44.4	69.2	75.8
Drafting/Design	81.8	86.0	80.8
Electrical/Electronics	69.2	72.2	73.8
Electric Power	100.0	----	66.7
Electro-Mechanical	80.6	68.8	74.4
Energy Management	----	00.0	00.0
Heat Processing	----	40.0	50.0

TABLE 3
TECHNICAL PLACEMENT RATE BY PROGRAM COMPARED TO PREVIOUS TWO YEARS

Program	Technical Placement Rate 1987	1986	1985
ENGINEERING (Continued)			
Industrial Engineering	67.3	80.8	81.9
Industrial Graphics	81.4	93.5	75.7
Industrial Laboratory	100.0	100.0	100.0
Industrial Management	72.4	85.7	72.7
Instrumentation	41.7	50.0	66.7
Laser Optics	100.0	60.0	33.3
Manufacturing	78.4	72.3	79.7
Mechanical	84.7	81.0	83.7
Metallurgical	100.0	50.0	100.0
Mining	----	----	80.0
Modeling	100.0	50.0	40.0
Nuclear	66.7	70.0	77.8
Packaging	80.0	62.5	100.0
Petroleum	40.0	33.3	28.6
Plastics/Chemical	85.7	90.9	88.5
Quality Control	87.5	100.0	85.7
Scientific Measurement	71.4	66.7	100.0
Surveying	----	----	----
Telecommunications Engineering	60.0	50.0	80.0
Welding	71.4	78.9	56.5
TOTAL	76.4	76.2	77.8
HEALTH			
Animal Health	95.7	95.9	92.9
Cardiovascular	85.7	100.0	----
Dental Assisting	----	100.0	100.0
Dental Hygiene	95.9	87.3	96.2
Dental Laboratory	52.6	80.0	80.0
Dietetic	85.7	82.0	88.2
Emergency Medical	81.8	81.8	94.4
Histologic	66.7	100.0	100.0
Medical Assisting	87.8	84.0	78.2
Medical Laboratory	93.3	81.3	72.9
Medical Records	97.1	92.0	93.0
Mental Health	93.8	77.8	84.8
Nursing	97.6	95.7	92.2
Occupational Therapy Assisting	92.9	76.0	95.8
Ophthalmic	85.7	75.0	50.0
Optometric Assisting	100.0	100.0	95.7
Physician Assisting	100.0	100.0	83.3
Physical Therapy Assisting	97.7	100.0	100.0
Radiologic	96.7	97.3	94.7
Recreation Therapy Assisting	84.6	75.0	50.0
Respiratory	98.1	98.2	96.9
Surgical Assisting	93.3	81.2	75.0
TOTAL	95.7	92.7	89.9

TABLE 3
TECHNICAL PLACEMENT RATE BY PROGRAM COMPARED TO PREVIOUS TWO YEARS

Program	Technical Placement Rate 1987	1986	1985
AGRICULTURE/NATURAL RESOURCES			
Agricultural Business	88.0	41.7	80.0
Agricultural Materials	87.5	80.0	71.4
Agricultural Power	----	----	100.0
Agricultural Production	66.7	69.2	77.8
Agricultural Research/Lab	100.0	100.0	66.7
Agronomic Business	71.4	85.7	100.0
Conservation	100.0	00.0	66.7
Crop Management	----	----	75.0
Dairy Management	75.0	100.0	83.3
Envt Control Protection	83.3	42.9	66.7
Environmental Science	100.0	00.0	----
Floriculture	83.3	75.0	60.0
Food Marketing	100.0	75.0	100.0
Forest Management	87.9	65.2	62.5
Forest Products	100.0	100.0	100.0
Horse Production Management	75.0	84.6	93.3
Landscape/Turf Managemenmt	93.5	94.7	96.0
Livestock Production & Mgmt.	91.7	66.7	61.9
Nursery/Greenhouse Mgmt.	89.3	94.4	80.6
Parks/Recreation/Wildlife	51.9	54.9	51.0
TOTAL	77.5	70.6	72.2
PUBLIC SERVICES			
Broadcasting	100.0	80.0	100.0
Corrections	52.9	70.0	56.5
Early Childhood Development	85.6	83.3	84.4
Educational Services	----	----	
Fire Science	80.0	86.5	86.8
Handicapped Services	93.7	88.0	75.0
Law Enforcement	67.3	67.5	66.4
Library/Instructional Media	80.0	66.7	100.0
Public Administration	00.0	100.0	100.0
Recreational Services	50.0	50.0	100.0
Safety/Risk Management	----	----	50.0
Security	52.9	80.0	72.7
Social Services	73.4	78.4	66.1
TOTAL	72.9	75.5	72.8

placement rate for graduates of these programs was 92.7%, slightly (0.5%) above the level recorded in 1986. The technical placement rate was 77%, also slightly (1.2%) above the level recorded in 1986.

In addition to the general increases noted above, substantial increases in the technical placement rate for three particular programs in the business technologies were recorded:

	1987	1986
Court Reporting	93.8%	76.9%
Insurance	100.0%	80.0%
Interior Design	100.0%	66.7%

There were, however, several programs which fell below the 75% technical placement standard in 1986 and four of these have had substandard performance for three consecutive years:

	1987	1986	1985
Accounting	73.9%	68.3%	73.0%
Computer Progr.	69.7%	63.5%	61.1%
Graphic Arts	72.4%	73.0%	50.0%
Travel & Tourism	62.5%	55.6%	64.3%

It should be noted that the four programs which are identified as having had substandard placement rates for three consecutive years are maintaining high overall placement rates. Graduates of these programs do not seem to have great difficulty obtaining employment albeit outside their technical fields.

Engineering and Industrial Technologies

Degrees awarded to graduates of programs in the engineering and industrial technologies during Fiscal Year 1987 accounted for 20.7% of all technical associate degrees awarded by Ohio's state-

TABLE 4
1986 - 1987
TECHNICAL PROGRAM GRADUATE JOB PLACEMENT
ENGINEERING PROGRAMS

	NUMBER OF PROGRAMS	GRADUATES	RESPONDENTS	AVAILABLE FOR EMPLOYMENT	NUMBER EMPLOYED IN TECHNICAL FIELD	PERCENT EMPLOYED IN TECHNICAL FIELD	NUMBER EMPLOYED OUTSIDE FIELD	PERCENT EMPLOYED OUTSIDE FIELD	NUMBER UNEMPLOYED	PERCENT UNEMPLOYED
CIVIL CONSTRUCTN	15	107	100	67	60	89.6	7	10.4	0	0.0
ELECT ELECTRNCS	41	985	849	688	476	69.2	162	23.5	50	7.3
INDUSTRIAL ENG	16	71	65	52	35	67.3	10	19.2	7	13.5
MECHANICAL	26	382	328	242	205	84.7	19	7.9	18	7.4
NUCLEAR	1	12	12	12	8	66.7	1	8.3	3	25.0
AUTOMOTIVE	10	114	97	89	76	85.4	11	12.4	2	2.2
DIESEL	3	23	22	18	8	44.4	7	38.9	3	16.7
AVIATION ENG	2	18	13	13	10	76.9	0	0.0	3	23.1
ARCHITECTURAL	7	67	57	39	34	87.2	4	10.3	1	2.6
DRAFTING DESIGN	18	161	147	132	108	81.8	17	12.9	7	5.3
MODELING	1	2	2	2	2	100.0	0	0.0	0	0.0
TOOL AND DIE	1	9	9	9	7	77.8	2	22.2	0	0.0
BIOMEDICAL EQUIP	2	18	18	17	16	94.1	0	0.0	1	5.9
CPTR ELECTRNCS	4	43	36	32	23	71.9	8	25.0	1	3.1
ELECRTIC POWER	1	1	1	1	1	100.0	0	0.0	0	0.0
ELECTRO-MECHANIC	7	85	72	67	54	80.6	8	11.9	5	7.5
INSTRUMENTATION	1	14	13	12	5	41.7	5	41.7	2	16.7
LASER OPTICS	1	16	10	8	8	100.0	0	0.0	0	0.0
TELECOMMUNIC ENG	1	7	7	5	3	60.0	2	40.0	0	0.0
ENERGY MGT	1	3	0	0	0	.	0	.	0	.
INDUSTRIAL GRAPH	3	71	51	43	35	81.4	6	14.0	2	4.7
INDUSTRIAL LAB	1	9	8	8	8	100.0	0	0.0	0	0.0
MICROPRECISION	1	2	2	1	1	100.0	0	0.0	0	0.0
SCI MEASUREMENT	1	9	7	7	5	71.4	2	28.6	0	0.0
MANUFACTURING	15	111	85	74	58	78.4	12	16.2	4	5.4
CERAMIC	1	27	26	24	21	87.5	1	4.2	2	8.3
INDUSTRIAL MGT	6	40	29	29	21	72.4	7	24.1	1	3.4
PACKAGING	1	5	5	5	4	80.0	1	20.0	0	0.0
QUALITY CONTROL	3	20	17	16	14	87.5	1	6.3	1	6.3
WELDING	6	14	11	7	5	71.4	1	14.3	1	14.3
CLIMATE CONTROL	5	33	28	24	21	87.5	2	8.3	1	4.2
METALLURGICAL	1	4	4	4	4	100.0	0	0.0	0	0.0
PETROLEUM	2	11	11	10	4	40.0	4	40.0	2	20.0
PLASTIC-CHEMICAL	5	39	38	28	24	85.7	2	7.1	2	7.1
TOTAL	210	2533	2180	1785	1364	76.4	302	16.9	119	6.7

assisted two-year campuses. The overall placement rate for graduates of these programs was 93.3%, slightly (0.8%) above the level recorded in 1986. The technical placement rate was 76.4%, exceeding the 75% level required by the Regents and also slightly (0.2%) above the level recorded in 1986 (Table 4).

Substantial increases were recorded in the technical placement rates for nine particular programs in the engineering and industrial technologies:

	1987	1986
Biomedical Equipment	94.1%	80.0%
Climate Control	87.5%	71.8%
Computer Electronics	71.9%	61.8%
Electro-Mechanical	80.6%	68.8%
Laser Optics	100.0%	60.0%
Metallurgical	100.0%	50.0%
Modeling	100.0%	50.0%
Packaging	80.0%	62.5%
Telecom Eng	60.0%	50.0%

There were also several particular programs which fell below the 75% technical placement standard in 1987 and four of these have had substandard performance for three consecutive years:

	1987	1986	1985
Computer Electronics	71.9%	61.8%	58.3%
Electrical/Electronics	69.2%	72.2%	73.8%
Instrumentation	41.7%	50.0%	66.3%
Petroleum	40.0%	33.3%	28.6%

Eight of the programs which showed substantial improvement in technical placement this year had substandard technical placement rates last year. Two of the programs identified as having a substandard placement rate, Computer Electronics and Electrical/Electronics, have high overall placement rates.

TABLE 5
1986 - 1987
TECHNICAL PROGRAM GRADUATE JOB PLACEMENT
HEALTH TECHNOLOGIES PROGRAMS

	NUMBER OF PROGRAMS	GRADUATES	RESPONDENTS	AVAILABLE FOR EMPLOYMENT	NUMBER EMPLOYED IN TECHNICAL FIELD	PERCENT EMPLOYED IN TECHNICAL FIELD	NUMBER EMPLOYED OUTSIDE FIELD	PERCENT EMPLOYED OUTSIDE FIELD	NUMBER UNEMPLOYED	PERCENT UNEMPLOYED
ANIMAL HEALTH	2	48	46	46	44	95.7	0	0.0	2	4.3
DENTAL HYGIENE	8	119	104	97	93	95.9	0	0.0	4	4.1
DENTAL LAB	2	29	25	19	10	52.6	7	36.8	2	10.5
DIETETIC	5	68	52	42	36	85.7	1	2.4	5	11.9
EMERGENCY MEDICL	5	15	14	11	9	81.8	2	18.2	0	0.0
MED ASSISTING	11	185	162	147	129	87.8	10	6.8	8	5.4
MEDICAL LAB	15	145	124	119	111	93.3	4	3.4	4	3.4
HISTOLOGIC	1	3	3	3	2	66.7	0	0.0	1	33.3
MEDICAL RECORD	6	92	75	68	66	97.1	2	2.9	0	0.0
MENTAL HEALTH	6	103	86	65	61	93.8	1	1.5	3	4.6
NURSING	25	1820	1526	1470	1434	97.6	20	1.4	16	1.1
OCCUPATL THERAPY	3	35	29	28	26	92.9	0	0.0	2	7.1
RECREA T ASSIST	1	17	16	13	11	84.6	2	15.4	0	0.0
OPHTHALMIC	1	10	7	7	6	85.7	0	0.0	1	14.3
OPTOM ASSISTING	2	13	13	12	12	100.0	0	0.0	0	0.0
PHYSICAL THERAPY	5	109	87	87	85	97.7	1	1.1	1	1.1
PHYSCN ASSISTING	1	12	7	7	7	100.0	0	0.0	0	0.0
RADIOLOGIC	15	219	191	180	174	96.7	2	1.1	4	2.2
RESPIRATORY	13	193	164	162	159	98.1	2	1.2	1	.6
SURGICAL	6	91	68	60	56	93.3	2	3.3	2	3.3
CARDIOVASCULAR	1	11	8	7	6	85.7	1	14.3	0	0.0
TOTAL	134	3337	2807	2650	2537	95.7	57	2.2	56	2.1

Health Technologies

In Fiscal Year 1987, 27.3% of the technical associate degrees awarded by Ohio's state-assisted two-year campuses were awarded to graduates of programs in the health technologies. The overall placement rate for graduates of these programs was 97.9%. The technical placement rate was 95.7%, more than 3% above the 1986 level, and the highest rate achieved for all program categories (Table 5).

Only two programs in this category fell below the 75% technical placement standard in 1987 and no program in this category has had substandard performance for three consecutive years. Graduates of health technologies programs have reported the highest levels of technical employment since the beginnings of this survey and this year's record was no exception.

Agricultural and Natural Resources Technologies

Degrees awarded to graduates of programs in the agricultural and natural resources technologies during Fiscal Year 1987 accounted for only 3.1% of all technical associate degrees awarded by Ohio's state-assisted two-year campuses. The overall placement rate for graduates of these programs was 93.4%, 2.5 percentage points above the level recorded in 1986. The technical placement rate was 77.5%, seven percent above the level recorded in 1986.

Substantial increases in the technical placement rates for seven programs which met the 75% standard in this category were recorded:

TABLE 6
1986 - 1987
TECHNICAL PROGRAM GRADUATE JOB PLACEMENT
AGRICULTURAL - NATURAL RESOURCES PROGRAMS

	NUMBER OF PROGRAMS	GRADUATES	RESPONDENTS	AVAILABLE FOR EMPLOYMENT	NUMBER EMPLOYED IN TECHNICAL FIELD	PERCENT EMPLOYED IN TECHNICAL FIELD	NUMBER EMPLOYED OUTSIDE FIELD	PERCENT EMPLOYED OUTSIDE FIELD	NUMBER UNEMPLOYED	PERCENT UNEMPLOYED
AGRI BUSINESS	3	29	25	25	22	88.0	3	12.0	0	0.0
AGRI MATERIALS	1	9	9	8	7	87.5	0	0.0	1	12.5
AGRI PRODUCTION	2	9	9	6	4	66.7	2	33.3	0	0.0
AGRI RESEARCHLAB	1	1	1	1	1	100.0	0	0.0	0	0.0
AGRONMC BUSINESS	1	16	16	14	10	71.4	3	21.4	1	7.1
DAIRY MGT	1	8	8	8	6	75.0	2	25.0	0	0.0
ENVIRONMENTL SCI	2	2	2	2	2	100.0	0	0.0	0	0.0
ENV CONTROL PROT	2	13	13	12	10	83.3	0	0.0	2	16.7
FOREST MGT	1	37	36	33	29	87.9	1	3.0	3	9.1
PARKS & RECREATN	2	118	103	79	41	51.9	30	38.0	8	10.1
CONSERVATION	1	2	2	1	1	100.0	0	0.0	0	0.0
FOOD MARKETING	1	3	3	3	3	100.0	0	0.0	0	0.0
FOREST PRODUCTS	1	2	2	2	2	100.0	0	0.0	0	0.0
HORSE PROD MGT	1	16	16	16	12	75.0	3	18.8	1	6.3
LANDSCP-TURF MGT	2	53	47	46	43	93.5	0	0.0	3	6.5
LIVESTOCK MGT	1	16	14	12	11	91.7	1	8.3	0	0.0
NURSERY-GREENHSE	2	36	31	28	25	89.3	2	7.1	1	3.6
FLORICULTURE	1	8	7	6	5	83.3	1	16.7	0	0.0
TOTAL	26	378	344	302	234	77.5	48	15.9	20	6.6

	1987	1986
Agri Business	88.0%	41.7%
Conservation	100.0%	00.0%
Envt Control Prot	83.3%	42.9%
Envt Science	100.0%	00.0%
Food Marketing	100.0%	00.0%
Forest Management	87.9%	65.2%
Livestock Prod Mgmt	91.7%	66.7%

Three out of the eighteen programs in this category fell below the 75% technical placement standard and only one, Parks/Recreation/Wildlife, has had substandard performance for three consecutive years.

It should be noted, that many of the programs in the agricultural and natural resource technologies have small enrollments and that small increases or decreases in the number of persons employed make rather large differences in terms of percentage increases and decreases. It should also be noted, however, that the program in this category with the largest enrollment, Parks and Recreation, had a relatively low overall placement rate and a low technical placement rate this year.

Public Service Technologies

In Fiscal Year 1987, only 7.5% of the technical associate degrees awarded by Ohio's state-assisted two-year campuses were awarded to graduates of programs in the public service technologies. The overall placement rate for graduates of these programs was 91.6%, 1.3% under the level recorded in 1986. The technical placement rate was 72.9%, 2.6 percentage points below the level

TABLE 7
1986 - 1987
TECHNICAL PROGRAM GRADUATE JOB PLACEMENT
PUBLIC SERVICE TECHNOLOGIES PROGRAMS

	NUMBER OF PROGRAMS	GRADUATES	RESPONDENTS	AVAILABLE FOR EMPLOYMENT	NUMBER EMPLOYED IN TECHNICAL FIELD	PERCENT EMPLOYED IN TECHNICAL FIELD	NUMBER EMPLOYED OUTSIDE FIELD	PERCENT EMPLOYED OUTSIDE FIELD	NUMBER UNEMPLOYED	PERCENT UNEMPLOYED
BROADCASTING	1	8	8	4	4	100.0	0	0.0	0	0.0
EARLY CHILDHOOD	13	198	151	132	113	85.6	14	10.6	5	3.8
LIBRARY-MEDIA	3	6	5	5	4	80.0	0	0.0	1	20.0
FIRE SCIENCE	7	35	30	25	20	80.0	4	16.0	1	4.0
LAW ENFORCEMENT	22	428	362	256	173	67.6	58	22.7	25	9.8
CORRECTIONS	5	48	35	17	9	52.9	7	41.2	1	5.9
SECURITY	4	23	18	17	9	52.9	7	41.2	1	5.9
PUBLIC ADMIN	1	4	4	4	0	0.0	2	50.0	2	50.0
SOCIAL SERVICES	13	143	116	79	58	73.4	10	12.7	11	13.9
HANDICAPPED SERV	4	26	20	16	15	93.7	1	6.3	0	0.0
RECREATNAL SERV	1	2	2	2	1	50.0	1	50.0	0	0.0
TOTAL	74	921	751	557	406	72.9	104	18.7	47	8.4

recorded in 1986, and not high enough to meet the Regents' 75% standard. Six individual programs in this category did not meet the 75% standard (Table 7).

Substantial increases in the technical placement rates for two programs in this category which met the 75% standard were recorded:

	1987	1986
Broadcasting	100.0%	80.0%
Library/Instruct Media	80.0%	66.7%

There were also two programs in this category which fell below the 75% technical placement standard for three consecutive years:

	1987	1986	1985
Corrections	52.9%	70.0%	56.5%
Law Enforcement	67.6%	67.5%	66.4%

As was the case with the agricultural/natural resource technologies, it should be noted here that many programs in this category have small enrollments and that small increases or decreases in the number of persons employed make rather large differences in terms of percentage increases. It should also be noted that the overall placement rate for graduates of most of these programs is quite high.

Productivity

It was noted earlier that the Board of Regents and the colleges and universities work cooperatively to develop and maintain excellence in two-year campus academic programs and mutually sup-

port each other's efforts in this regard. Although judgments about quality are essential to reaching decisions about the kinds of programs to be offered and whether certain programs should be continued or not, there are times when other factors must also be taken into account. In some cases, decisions must be based upon choices between and among programs - all of which are of high quality and which serve legitimate needs, but not all of which can be funded without diminution of the quality of the whole. Thus, decisions will be made not only on the basis of quality and need but also on how great is the need for one quality program as compared to other quality programs.

It is with this perspective that this report addresses the issue of degree productivity. The question is not whether a program is good or bad, needed or not needed, but whether an institution's resources should continue to be committed to a program that results in three or four degrees annually. While low degree production does not of itself necessarily indicate inefficiency or that a program is not responding to some need, the number of degrees awarded statewide per program does give the Board of Regents some sense of where there may be excess capacity and some indication of either how critical a need is or how successful we have been in responding to it. Several years ago, a standard of eight graduates annually was adopted as minimally indicative of sufficiently strong response to a need to warrant program continuation.

Table 9 lists programs, by category, which either (a) grad-

uated fewer than eight students per program last year or (b) placed fewer than 75% of their students in jobs related to their technology. These findings suggest that no additional programs appearing on this list should be approved in this coming academic year either because current capacity exceeds student demand, or current output exceeds labor market demand.

TABLE 9
1986 - 1987
TECHNICAL PROGRAM GRADUATE JOB PLACEMENT
LIST OF TWO YEAR PROGRAMS WITH
LESS THAN EIGHT GRADUATES OR
LESS THAN 75% PLACEMENT RATE

	GRADUATES	AVERAGE GRADUATES PER PROGRAM	NUMBER AVAILABLE FOR EMPLOYMENT	NUMBER EMPLOYED IN TECHNICAL FIELD	PERCENT EMPLOYED IN TECHNICAL FIELD	NUMBER EMPLOYED OUTSIDE FIELD	PERCENT EMPLOYED OUTSIDE FIELD	NUMBER NOT EMPLOYED	PERCENT NOT EMPLOYED
BUSINESS									
ACCOUNTING	833	23.14	652	482	73.93	115	17.64	55	8.44
COMMERCIAL ART	104	20.80	72	49	68.06	13	18.06	10	13.89
GRAPHIC ARTS	38	9.50	29	21	72.41	6	20.69	2	6.90
BUSINESS MGT	1276	29.00	923	669	72.48	172	18.63	82	8.88
AVIATION	3	3.00	2	1	50.00	1	50.00	0	0.00
CPTR PROGRAMMING	392	16.33	320	223	69.69	66	20.62	31	9.69
HOTEL MGT	7	7.00	2	2	100.00	0	0.00	0	0.00
TRAVEL & TOURISM	31	15.50	24	15	62.50	6	25.00	3	12.50
INDUST MARKETING	50	25.00	27	18	66.67	8	29.63	1	3.70
INSURANCE	6	6.00	6	6	100.00	0	0.00	0	0.00
REAL ESTATE	26	2.60	16	11	68.75	4	25.00	1	6.25
TRANSPORTATION	44	8.80	32	17	53.13	13	40.63	2	6.25
LOGISTICS	1	1.00	1	1	100.00	0	0.00	0	0.00

TABLE 9
1986 - 1987
TECHNICAL PROGRAM GRADUATE JOB PLACEMENT
LIST OF TWO YEAR PROGRAMS WITH
LESS THAN EIGHT GRADUATES OR
LESS THAN 75% PLACEMENT RATE

	GRADUATES	AVERAGE GRADUATES PER PROGRAM	NUMBER AVAILABLE FOR EMPLOYMENT	NUMBER EMPLOYED IN TECHNICAL FIELD	PERCENT EMPLOYED IN TECHNICAL FIELD	NUMBER EMPLOYED OUTSIDE FIELD	PERCENT EMPLOYED OUTSIDE FIELD	NUMBER NOT EMPLOYED	PERCENT NOT EMPLOYED
ENGINEERING									
ELECT ELECTRNCS	985	24.02	688	476	69.19	162	23.55	50	7.27
INDUSTRIAL ENG	71	4.44	52	35	67.31	10	19.23	7	13.46
NUCLEAR	12	12.00	12	8	66.67	1	8.33	3	25.00
DIESEL	23	7.67	18	8	44.44	7	38.89	3	16.67
MODELING	2	2.00	2	2	100.00	0	0.00	0	0.00
CPTR ELECTRNCS	43	10.75	32	23	71.88	8	25.00	1	3.13
ELECRTIC POWER	1	1.00	1	1	100.00	0	0.00	0	0.00
INSTRUMENTATION	14	14.00	12	5	41.67	5	41.67	2	16.67
TELECOMMUNIC ENG	7	7.00	5	3	60.00	2	40.00	0	0.00
ENERGY MGT	3	3.00	0	0	.	0	.	0	.
MICROPRECISION	2	2.00	1	1	100.00	0	0.00	0	0.00
SCI MEASUREMENT	9	9.00	7	5	71.43	2	28.57	0	0.00
INDUSTRIAL MGT	40	6.67	29	21	72.41	7	24.14	1	3.45
PACKAGING	5	5.00	5	4	80.00	1	20.00	0	0.00
WELDING	14	2.33	7	5	71.43	1	14.29	1	14.29
METALLURGICAL	4	4.00	4	4	100.00	0	0.00	0	0.00
PETROLEUM	11	5.50	10	4	40.00	4	40.00	2	20.00

TABLE 9
1986 - 1987
TECHNICAL PROGRAM GRADUATE JOB PLACEMENT
LIST OF TWO YEAR PROGRAMS WITH
LESS THAN EIGHT GRADUATES OR
LESS THAN 75% PLACEMENT RATE

	GRADUATES	AVERAGE GRADUATES PER PROGRAM	NUMBER AVAILABLE FOR EMPLOYMENT	NUMBER EMPLOYED IN TECHNICAL FIELD	PERCENT EMPLOYED IN TECHNICAL FIELD	NUMBER EMPLOYED OUTSIDE FIELD	PERCENT EMPLOYED OUTSIDE FIELD	NUMBER NOT EMPLOYED	PERCENT NOT EMPLOYED
HEALTH									
DENTAL LAB	29	14.50	19	10	52.63	7	36.84	2	10.53
HISTOLOGIC	3	3.00	3	2	66.67	0	0.00	1	33.33

TABLE 9
1986 - 1987
TECHNICAL PROGRAM GRADUATE JOB PLACEMENT
LIST OF TWO YEAR PROGRAMS WITH
LESS THAN EIGHT GRADUATES OR
LESS THAN 75% PLACEMENT RATE

	GRADUATES	AVERAGE GRADUATES PER PROGRAM	NUMBER AVAILABLE FOR EMPLOYMENT	NUMBER EMPLOYED IN TECHNICAL FIELD	PERCENT EMPLOYED IN TECHNICAL FIELD	NUMBER EMPLOYED OUTSIDE FIELD	PERCENT EMPLOYED OUTSIDE FIELD	NUMBER NOT EMPLOYED	PERCENT NOT EMPLOYED
AG-NAT RESOURCES									
AGRI PRODUCTION	9	4.50	6	4	66.67	2	33.33	0	0.00
AGRI RESEARCHLAB	1	1.00	1	1	100.00	0	0.00	0	0.00
AGRONMC BUSINESS	16	16.00	14	10	71.43	3	21.43	1	7.14
ENVIRONMENTL SCI	2	1.00	2	2	100.00	0	0.00	0	0.00
PARKS & RECREATN	118	59.00	79	41	51.90	30	37.97	8	10.13
CONSERVATION	2	2.00	1	1	100.00	0	0.00	0	0.00
FOOD MARKETING	3	3.00	3	3	100.00	0	0.00	0	0.00
FOREST PRODUCTS	2	2.00	2	2	100.00	0	0.00	0	0.00

TABLE 9
1986 - 1987
TECHNICAL PROGRAM GRADUATE JOB PLACEMENT
LIST OF TWO YEAR PROGRAMS WITH
LESS THAN EIGHT GRADUATES OR
LESS THAN 75% PLACEMENT RATE

	GRADUATES	AVERAGE GRADUATES PER PROGRAM	NUMBER AVAILABLE FOR EMPLOYMENT	NUMBER EMPLOYED IN TECHNICAL FIELD	PERCENT EMPLOYED IN TECHNICAL FIELD	NUMBER EMPLOYED OUTSIDE FIELD	PERCENT EMPLOYED OUTSIDE FIELD	NUMBER NOT EMPLOYED	PERCENT NOT EMPLOYED
PUBLIC SERVICE									
LIBRARY-MEDIA	6	2.00	5	4	80.00	0	0.00	1	20.00
LAW ENFORCEMENT	428	19.45	256	173	67.58	58	22.66	25	9.77
CORRECTIONS	48	9.60	17	9	52.94	7	41.18	1	5.88
SECURITY	23	5.75	17	9	52.94	7	41.18	1	5.88
PUBLIC ADMIN	4	4.00	4	0	0.00	2	50.00	2	50.00
SOCIAL SERVICES	143	11.00	79	58	73.42	10	12.66	11	13.92
RECREATNAL SERV	2	2.00	2	1	50.00	1	50.00	0	0.00

SUMMARY

The findings reported here are, like those reported last year, very encouraging given the negative impact the economic recession had on job placement over the past several years. For the fourth straight year the unemployment rate for Ohio's technical associate degree graduates declined. The unemployment rate for all Ohio citizens of comparable age in 1987 was nearly three times as high as that for technical associate degree graduates. Increases were recorded in both overall and technical placement rates. The overall placement rate was 94.3%, an improvement of almost one percent above last year's level. The technical placement rate was 82.1%, up more than one percent from last year. The findings, therefore, continue to suggest that as the economy improves and more jobs become available, technical education graduates are well prepared to compete for those jobs.

Even though general improvements have been recorded, some problems and concerns have been identified with regard to the performance of particular programs. These programs and concerns should still be viewed within the context of the general economic condition of the state and the nation in 1987. Economic recovery is far from complete at either level. Nevertheless, the problem areas should be investigated further to determine whether some programs are too numerous and whether some may no longer be needed. Special attention should be directed toward those programs exhibiting both low productivity and lower than expected technical placement. Appropriate follow-up and use of this data should occur

in the coming year in both the program approval and program review processes.

Alva T. Bonda, Cleveland, Chairperson
Anita S. Ward, Columbus, Vice Chairperson
Judge Lloyd O. Brown, Shaker Heights, Secretary
Paul M. Dutton, Youngstown
Robert L. Evans, Rio Grande
Ralph K. Frasier, Columbus
N. Victor Goodman, Columbus
Richard L. Krabach, Cincinnati
Raymond T. Sawyer, Shaker Heights

Senator H. Cooper Snyder, Hillsboro, (Ex officio)
Representative Ronald V. Gerberry, Austintown, (Ex officio)

William B. Coulter, Chancellor

ERIC Clearinghouse for
Junior Colleges
DEC 16 1988